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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/898,328

07/03/2001

Louis L. Hsu

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(728-21)

4784

7590

05/22/2003

Paul J. Farrell, Esq.
DILWORTH & BARRESE, LLP
333 Earle Ovington Blvd.
Uniondale, NY 11553

EXAMINER

CUNNINGHAM, TERRY D

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,328

Applicant(s)

HSU ET AL.

Examiner

Terry D. Cunningham

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Last Action Vacated

This action is in response to a telephone conversation with Applicant's Representative on 13 May 2003. It was determined that the action mailed 21 February 2003 included errors making a response thereto rather difficult. Therefore, the action mailed 21 February 2003 is hereby vacated and the period for response is hereby restarted. Any inconvenience to the Applicant caused thereby is regretted. The following corrected action is provided in lieu of the vacated action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16-28 are rejected under 35 U.S.C. § 112, first paragraph, as based on a disclosure which is not enabling. Charge pump 500 is deemed critical or essential to the practice of the invention, but is not included in the claim(s). An arrangement lacking this feature is not enabled by the disclosure since it cannot be understood from the specification how the circuit can be a "voltage generator system" without the charge pump. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14, 16-31 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 9-11, since the “control circuit” and the “charge pump” are not part of the claimed circuit, i.e., the “programming circuit”, it is not understood what the relevance of the language therein is. As seen, the “control circuit” and the “charge pump” are only seen to be “intended use” recitation.

Claims 10-13 are rejected for the reasons discussed above with claim 1.

In claim 2, lines 11-13, since the “control circuit” is not part of the claimed circuit, i.e., the “programming circuit”, it is not understood what the relevance of the language therein is. As seen, the “control circuit” is only seen to be “intended use” recitation. It is suggested that lines 1-3 recite something such as --A programming circuit and a control circuit for controlling a charge pump of a voltage generator system, wherein the programming circuit comprises:”.

Claims 3-9 are rejected for the reasons discussed above with claim 2.

In claim 13, since the “processor” is not part of the claimed circuit, i.e., the “programming circuit”, it is not understood what the relevance of the language therein is. As seen, the “processor” is only seen to be “intended use” recitation.

In claim 14, since the “MOS transistor” is not part of the claimed circuit, i.e., the “programming circuit”, it is not understood what the relevance of the language therein is. As seen, the “MOS transistor” is only seen to be “intended use” recitation.

In claim 16, it is deemed misdescriptive to refer to the circuit as a “DC voltage generator system” when it is clear from the specification that the circuit cannot provide a “DC voltage” without charge pump 500 of Fig. 1. In line 2, the phrase “a voltage generator system of said at

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least one voltage generator system” is not understood. Firstly, the language would at least be seen to be redundant. Secondly, the language would appear to be stating that the “at least one voltage generator system” has more than one “voltage generator system” which has not be recited.

In claim 17, it is deemed misdescriptive to refer to the circuit as a “DC voltage generator system” when it is clear from the specification that the circuit cannot provide a “DC voltage” without charge pump 500 of Fig. 1. In line 9, there is no antecedent for “said control circuit”.

Claims 18-24 are rejected for the reasons discussed above with claim 17.

Claims 25-28 are rejected for the reasons discussed above with claim 16.

Claim 28 is rejected for similar reasons as claim 13.

Claims 29-31 and 33 are rejected for similar reasons as 1 and 10-13.

Claim Rejections - 35 USC § 102

Examiner has reconsidered the subject matter of previously objected to claims 2, 17 and 32, and has deemed to following grounds of rejection to be in order.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16 and 25-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Horowitz et al. (USPN 5,254,883). Horowitz et al. disclose, in Fig. 6, a circuit comprising: “means for receiving (137a-137e)”; “means for processing (127)”; and “means for outputting (130 and 5R), all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. As discussed above, the recitation concerning the "control circuit", the "charge pump", the "processor" and the "MOS transistor" are merely "intended use" recitation. As would be understood by one skilled in the art, the reference to Horowitz et al. is clearly capable of providing the claimed "intended use".

Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Itoh et al. (USPN 5,388,084, cited 21 February 2003). Itoh et al. disclose in Figs. 13-15, a circuit comprising: "charge pump (20)"; "a limiter (21)"; "an oscillator (19 and Fig. 15)"; "a control circuit (19, 21, 25, 27, 29-33 and 61)"; and "programming circuit (remainder of circuit)" having "means for receiving (input signals SW0-SW7)", "means for processing (switches 28) using at least a series of bias stages (R1-R9)", "means for generating (25-35)" and "means for outputting (voltage being output between 30 and 32 and/or node V_A)", all connected and operating similarly as recited by Applicant.

With respect to claims 3-9 and 18-24, the circuit to Itoh et al. clearly provides "a first output control signal (V_A)" and "a second output control signal (generated between 30 and 32 and provided to 61)" responsive to "a first input control signal (any of SW0-SW7)" and "a second output control signal (another other of SW0-SW7)".

Allowable Subject Matter

It appears that claims 3-9 and 18-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action, to include all of the limitations of the base claim and any intervening claims and such that claims 3 and 18 were amended such that --exclusively-- were inserted before "generating" in lines 2 and 5.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone numbers for Technology Center 2800 are 703-872-9318 for Before Final communications and 703-872-9319 for After Final communications. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC
May 19, 2003


Terry D. Cunningham
Primary Examiner
Art Unit 2816